

What is claimed is:

- 1 1. A line trimmer head for a motorized trimmer, comprising:  
 2 a spool housing for housing a spool of cutting line;  
 3 biasing means for biasing the spool towards the top of the spool housing;  
 4 forcing means for forcing the spool towards the bottom of the spool housing  
 5 against the biasing means; and  
 6 (spinning means) for spinning the spool housing.
- 1 2. The line trimmer head as set forth in claim 1 wherein the biasing means is  
 2 a spring.
- 1 3. The line trimmer head as set forth in claim 1 wherein the forcing means  
 2 comprises:  
 3 a bottom ring located within the spool housing on top of the spool;  
 4 a top ring located on top of the spool housing and connected to the bottom ring by  
 5 a plurality of rigid pins extending through the top of the spool housing; and  
 6 pushing means for pushing the top ring and attached bottom ring downwards  
 7 forcing the spool against the bias of the biasing means.
- 1 4. The line trimmer head as set forth in claim 3 wherein the pushing means  
 2 comprises a manually actuated rod.
- 1 5. The line trimmer head as set forth in claim 3 wherein the pushing means  
 2 comprises an electrically actuated rod.
- 1 6. The line trimmer head as set forth in claim 1 wherein the spinning means  
 2 is an electric motor.

not shown 1 7. The line trimmer head as set forth in claim 1 wherein the spinning means  
2 is a hydraulic motor.

1 8. The line trimmer head as set forth in claim 1 wherein the inner surface of  
2 the top of the spool housing includes mechanical members which engage with  
3 mechanical members on the top of the spool such that the spinning means causes the  
4 spool to spin in conjunction with the spool housing.

1 9. The line trimmer head as set forth in claim 8 wherein the mechanical  
2 members on the inner surface of the top of the spool housing and the mechanical  
3 members on the top of the spool are teeth.

1 10. A line trimmer head for a motorized trimmer, comprising:  
2 a spool housing for housing a spool of cutting line; the inner surface of the top of  
3 the spool housing having driving teeth which engage with driving teeth located in the  
4 upper surface of the spool;  
5 a bottom ring located within the spool housing on top of the spool;  
6 a top ring located on top of the spool housing and connected to the bottom ring by  
7 a plurality of rigid pins extending through the top of the spool housing;  
8 a spring for biasing the spool towards the inner surface of the top of the spool  
9 housing;  
10 a motor for spinning the spool housing such that the teeth in the spool housing  
11 engage the teeth in the spool to spin the spool of cutting line; and  
12 a rod which is remotely electrically actuated to force the top ring and attached  
13 bottom ring downwards forcing the spool against the bias of the spring and temporarily  
14 disengages the driving teeth on the spool housing from the driving teeth on the spool.

1 11. The line trimmer head as set forth in claim 10 further comprising a rod  
2 biasing means for biasing the rod away from the top of the spool housing.

1           12.     The line trimmer head as set forth in claim 11 wherein the biasing means  
2           <sup>55</sup>is a spring.

1           13.     The line trimmer head as set forth in claim 10 wherein the rod further  
2           includes a striking <sup>51</sup>plate which acts to force the top <sup>39</sup>ring <sup>52</sup>downwards when the rod is  
3           actuated.

1           14.     A line trimmer head for a motorized trimmer, comprising:  
2           a spool <sup>34</sup>housing for housing a spool <sup>35</sup>of cutting line; the inner surface of the top of  
3           the spool housing having driving teeth <sup>42</sup>which engage with driving teeth <sup>42</sup>located in the  
4           upper surface of the spool;  
5           a bottom <sup>38</sup>ring located within the spool housing on top of the spool;  
6           a top <sup>39</sup>ring located on top of the spool <sup>34</sup>housing and connected to the bottom ring by  
7           a plurality of rigid <sup>40</sup>pins extending through the top of the spool housing;  
8           a spring <sup>36</sup>for biasing the spool <sup>35</sup>towards the inner surface of the top of the spool <sup>34</sup>  
9           housing;  
10          a motor <sup>34</sup>for spinning the spool housing such that the teeth <sup>42</sup>in the spool housing  
11          engage the teeth <sup>42</sup>in the spool to spin the spool of cutting line; and  
12          a rod <sup>56</sup>which is remotely manually actuated to force the top <sup>39</sup>ring and attached bottom  
13          ring <sup>38</sup>downwards forcing the spool <sup>35</sup>against the bias of the spring <sup>36</sup>and temporarily  
14          disengages the driving teeth on the spool housing from the driving teeth on the  
15          spool.

1           15.     The line trimmer head as set forth in claim 14 further comprising a rod  
2           biasing means <sup>35</sup>for biasing the rod <sup>56</sup>away from the top of the spool <sup>34</sup>housing.

1           16.     The line trimmer head as set forth in claim 15 wherein the biasing means  
2           <sup>55</sup>is a spring.

- 1           17.    The line trimmer head as set forth in claim 14 wherein the rod further  
2           includes a striking<sup>57</sup> plate which acts to force the top ring downwards when the rod is  
3           actuated.

2021.20.42342001